

Appl. No. 10/006,060
Amdt. dated 04/26/2005
Reply to Office Action of 01/26/2005

REMARKS

Claims 1 - 20 are pending in the present Application. In the above-identified Office Action, the Examiner objected to the Specification and to Claims 1, 2, 6, 7, 11, 12, 16 and 17 because of some informalities. Claims 1 - 20 were rejected under 35 U.S.C. §103(a) as being unpatentable over W3C, "XTND-XML Transition Network Definition" in view of Yepishin et al.

The Examiner is thanked for the interview of April 26, 2005. During the interview, Applicants' attorney agreed to amend the preamble of the broadest claims (i.e., Claims 1, 6, 11 and 16) to define the term "XML schema". Consequently, Claims 1, 6, 11 and 16 have been amended.

Further, in response to the technical objection made to claims 1, 2, 6, 7, 11, 12, 16 and 17, independent Claims 1, 6, 11 and 16 have been amended to specify that XML is an acronym of "eXtensible Markup Language." Since this is done in the independent claims, the dependent claims (i.e., Claims 2, 7, 12 and 17) need not be amended as there is now proper antecedent basis to use XML as an acronym in those claims.

The Specification has also been amended to include the Serial Nos. of the Related Applications. The Specification is further amended to correct a typographical/grammatical error.

For the reasons stated more fully below, Applicants submit that the claims are allowable over the applied references. Hence, reconsideration, allowance and passage to issue are respectfully requested.

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As stated in the SPECIFICATION, most network application programs exchange data using data packets. Typically, a packet has a specific structure that incorporates internal fields that clearly delineate the packets' different contents. Using this structural representation, a user may devise algorithms that may be used to effectuate network simulation testing to debug network problems etc. The algorithms may be devised using a markup language.

A markup language is a language that allows additional text or tags that are invisible to users to be inserted into a document. Thus, the tags are not part of the content of the document but rather enhance the document. For example, the tags may be used to structure the document or to add hypertext capability to the document etc.

One of the markup languages that is particularly well suited for this task is the eXtensible Markup Language or XML. XML is a language that is especially designed for Web documents. It allows designers to create their own customized tags, enabling definition, transmission, validation, and interpretation of data between applications and between organizations. Thus, knowing the structure of the packets being exchanged, an XML document having customized tags representing the different contents of the packets may be created.

However, since customized tags are used in the XML document, the tags have to be properly defined to allow an application that is being used to present the document to the user to properly interpret the tags. This is

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ordinarily done by an XML schema. A schema defines the structure, content and semantics used in an XML document.

The present invention provides a method of generating an XML schema to validate an XML document that is used to represent network packet exchanges. In accordance with the teachings of the invention, transition states of the network packet exchanges are identified. Once identified, they are used to generate the XML schema.

The invention is set forth in claims of varying scopes of which Claim 1 is illustrative.

1. A method of generating an **eXtensible Markup Language (XML) schema to validate an XML document representing network packet exchanges**, the XML schema being used for defining, describing and cataloguing XML vocabularies for a class of the XML document in XML format, the method comprising the steps of:

identifying transition states of the network packet exchanges being investigated; and

generating, based on the transition states, the XML schema. (Emphasis added.)

The Examiner rejected the claims under 35 U.S.C. §103(a) as being unpatentable over W3C, "XTND-XML Transition Network Definition" in view of Yepishin et al. Applicants respectfully disagree.

Firstly, the XTND-XML Transition Network Definition reference does not purport to disclose a schema but rather a document type definition or DTD (see page 14).

A DTD states what tags and attributes are used to describe content in an XML document, where each tag is allowed, and which tags can appear within which other tags.

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Thus, a DTD is a formal description in XML Declaration Syntax of a particular type of document. It sets out what names are to be used for the different types of element, where they may occur, and how they all fit together.

A schema, on the other hand, is used to define and describe a class of XML documents by using schema components to constrain and document the meaning, usage and relationships of the constituent parts of the documents. Schemas may also provide for the specification of additional document information, such as normalization and default attribute and element values. Thus, an XML schema can be used to define, describe and catalogue XML vocabularies for classes of XML documents. Schemas are aimed at database-style applications where element data content requires validation; where stricter data control is needed than is possible with DTDs; or where strong data typing is required.

Thus, a DTD is not a schema and hence, Applicants submit that the XTND-XML Transition Network Definition reference does not teach, show or suggest **a method of generating an eXtensible Markup Language (XML) schema to validate an XML document representing network packet exchanges** and that the reference does not further teach the step of **identifying transition states of the network packet exchanges being investigated** as claimed by the Examiner.

Regarding Yepishin et al. reference, it purports to teach a system, method and computer program product for pattern replay using state recognition. It does not teach **a method of generating an eXtensible Markup Language (XML) schema to validate an XML document representing network**

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packet exchanges and that the reference does not further teach the step of **identifying transition states of the network packet exchanges being investigated.**

Since neither one of the applied references teaches, shows or suggests the emboldened-italicized limitations in above-reproduced Claim 1, combining their teachings together will not show the claimed invention.

Hence, Applicants submit that Claim 1, as well as its dependent claims, are allowable. Independent Claims 6, 11 and 16, which all incorporate the emboldened-italicized limitations in the above-reproduced claim 1, together with their dependent claims are also allowable. Consequently, Applicants once more respectfully request reconsideration, allowance and passage to issue of the claims in the application.

Respectfully submitted,
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